Notebook Series -- Pocket Notebooks
Notebook, PN-14-07-24

The dated entries in this pocket notebook cover the period July-December 1914. The book was used by Edison to record ideas about business matters, experiments to be tried, and other tasks to be performed. Some of the entries have been crossed out. Others appear to repeat entries from earlier books. Included are experimental notes on disc records and reproducers, kinetoscopes, batteries and chemicals, miner's lamps, locomotive headlights, and automobile starters. The business-related entries include notes regarding the sale of Amberola machines, numbers of disc records ordered daily, market share in motion picture projectors, the cost of Edison battery use in automobiles, and the cost of regenerating battery cells. There are also notes on music and recording artists, including lists of Edison records and comments on the talent of singers recording for Victor Records. An undated entry made shortly after the outbreak of World War I in August indicates Edison's intention to "shut up London office, send British music here, [and] close it up tight." In addition, there is a list of religious, civic, and Masonic organizations, possibly prepared in connection with the tone test recitals that were conducted beginning in September.

Among the numerous Edison employees mentioned in the book are master machinist Robert A. Bachman; Harry T. Leeming, head of the Purchasing Dept.; Walter H. Miller, head of the Recording Dept.; machinist and longtime Edison associate Frederick P. Ott; and Harold H. Smith, chief of the Battery Research Dept. There are also several references to industrialist Henry Ford. The flyleaf is inscribed "Ent final Apl 28 1919." The pages are unnumbered. Approximately 100 pages have been used.

PN-14-07-24

E-1710

Cut from C

Apl 28 1919

2996

July 24 1914

Dead cost At Mch 16 – 7.14
Service 32.

Total 7.46
With selling Expense 8.10
Labour without interest rent advertising Etc

Steam Theoretically required for
84 pressing 22 hours daily
50 HP Boiler

Test Piano funnels made by
Bainfield Co –

Put Extra piece on Piano hammers
like loading Nickel machine

Ferric Sulphate is the only Known
Sulphate soluable in Alcohol

Dilution always tend to make Basic
Salts –

Anderson Coupe Silver Thread Tires Convertible Seat
Asphalt Paint (Black) Wooden Wheels Tank 65 oz Weight 60 ?
Electric Horn (?) Electric Lamps Electric Dashboard Lamp
Gallery [illegible] finish 160

Overall Gasoline Tires	Watt hrs mile	Ah per	Volts	Consumed
80	92	18.2	47.3	50
75	91.5	18.2	[illegible]	50
60	94.5	18	47.3	50.5
50	98	17.6	46.3	52
45	100.5	17.4	46.3	53
40	103	16.9	45.5	53.2

We sell about 17.3 lt of Positive for each foot of Negatives

Miller estimates cost should be making 2.8 lbs old Ni into new at 28 cents per A4 Cell

Look up my old Concert books for Vidler references

Sulphur [illegible] in wintime sell to give reserve make some.

Patent new metallic battery Crate.

Baboon bags 10% of output rimbered records.

Ford changed to electric Before Change Weight 1755 - after Change 2275 lbs

52A4	750	Made 53 miles
Chassis	1275	Mechg around
Motor & Gear	250	Town
	2275	

Schedule of Disc Mfrg up to April 1 1915

#250	9828
200	8222
150	11428
	29478

Make some high carbon steel plates for Varnish — Tinned also

NH_4Fl forms a double salt with Al_2O_3 Try it in a neutrifying sol if it kills neutrification it will remove Al_2O_3 from old Cells —

Al_2O_3 Soluable in Caustic Barium hydrox Its used in Tests — also its sol in Ethylamine —

Must put out 10 Bonci Tunes yearly as contract makes us Take that many = If he dont do them good we can get out,

See if can get a Disc in a movie - high class, on Trial first say the E Orange one,

---

Following Potassium salts insoluble or little sol in water

Perbromate
Perchlorate
Pertungstate
Phosphite.
Phtalimide
Piperate
Pyrosulphite
Silicofluoride
Urate.

Following Lithia salts Insol

Borate
Fluoride
Phosphate,

Run Tests -

find out what blackens copper
disc moulds.

~~Dr English Celluloid man~~

~~Look up perfs old 4 yr + those used today~~

Amberol machines
Best Sellers

Amberola X		$30.00	
Next	6	60.00	
"	5	80.00	
	8	45.00	
Very poor	3	125.00	Use Disc Cabinets
	1	200.00	

Try color pigments in req
Disc Varnish, inorganic -

Projecting Machines

		Jobber	Dlr
Simplex			
Hand	$ 300	20% +	20 + 5
Motor	355	15	
Powers	260	20 + 15	20 + 5
Edison	250	40%	25 + 10

We have 3/4 Plating baths outside of Newark for preparatory on basis of 2 per week gives 125 daily

Sbcl (trichl) in Varnish delays final hardening, gets very leathery + Tough like celluloid

Ferric Chl in Varnish acts like Sesame, comes off plate easy

Smith = Put up 4 seq irons
Run 1 run, take out one iron –
run again Take out another
3 runs Take out another finally
another run & put all soak
in Water & deliver Iron to me
in the Water solution – Small
Cells will do –

Pick out 3 each of tunes
sung by Basso, Baritone,
Tenor, Soprano, Mezzo,
Contralto & Coloratura
Also Cello & Violin for standard

Have the machines rigged
up like Ernie does. I will
mark defects & then Miller
Crook the & his associate
Can come & hear them –

SbOH insol in NaOH, but sol in KOH. Try SbOH as Fe in NaOH with NiOH. also Copper
Na metantimoniate is the only insoluble salt of Sodium

Amidobenzol - strongly alkaline see if sol dilute see if Conducts

When 2 molecules of Boron Trioxide + 3 molecules of Lead Oxide are fused together product salt yellow glass which softens in hot oil good for Disc submasters

Pb Cy is insol in KCy Try battery Lead plates in KCy

Cupric Oxychloride is used in KOH. possibly same in NaOH. try as substitute for CuO in Leclanché.

Try Copper acetylide in Leclanché

Manganate of Barium in place of CuO in Leclanché

Antimony precip by Zn gives black powder of Meidlic Ds it is used to give steel to plaster paris articles — Dinioiddic try Celluloid mass

What is done with old Wax Masters

General Inspector for all plants — Report to Library

Smith = What has been done with the A4 cells made up entirely of split lites — put on long endurance —

Smith = Put up 2 A4 as now made on long endurance

Hutchinson says wants a quicker neg than Eastman I remember Lumieres had one 3 times quicker with just as fine a grain. Write

Fred Ott
Try Pantherfilm between glass under hydraulic

Get list of all outside pay roll of Beneficiaries Eld of all the Cos

[21]

When proper rigged up to
Run life test small cells
130 140 150 175
Fahr want quicker results

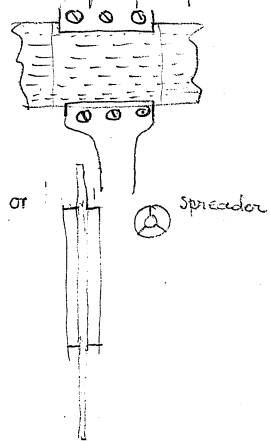
Cut open 20/4 yr tubes
2 parts + test contacts
on machine — Important

Put Vic and 4 yr tubes dipped
in Conc Coll also Nich
on 10 Hatrons

Get Dr Grothes for book

Fred Off. press record max
under hydraulic -

Bachman- Testing machine
test strength of strip



Cost of recovering 100 A 4

	Labor	Materials
Filing off covers	1.25	
Soak + disassemble	3 15	
Taking Ni tubes from grids	67	
Opening contacts	15.67	
Sawing ends of tubes	15 00	
Slitting tubes	39 17	20 82
12000 new tubes		40.00
Regenerating old Nickel	.84	
Pressing grids	.84	
Removing fe pockets	12 00	4.18
12000 new fe pockets		25.00
Regenerating fe 25c	1.40	
Reassembling Ni Plates	2.50	
" " fe "	8.09	
" Cells	2 55	1.33
30 New Cans	1.39	1.20
30 New Covers		7.54
10% Rubber parts	1.50	
Removing dope from Cans		14.00
Doping + forming Cells	106.00	16.50
Electrolyte	159 00	131.26
Overhead on labor 150%	131 26	
	$376.26	

Send Who old 1 lb Fe from 4 yr old
Cells treated 3% sulphurous to
62 gr ground 150 mesh dolomite
Miller — 600 cc 3%

Also send a pound yeast
as it is nutritional ~~using SO2~~
treatment.

Get payroll & expense
account for travellers
Each week also seeming
Department

Try inorganic pigment
in Condensate Vacuum

Continuous film use concentrated
beam from arc & use chiller
on the light.

By chemical tubes find
out all Hem
falling behind

What becomes of Melaphany Sermon, dreams Visions —

Hudson - Devotional meetings here lately taken with followers on Cal Nash & Stewart Field Electrocution - Whether becomes of ones —

Test Red Fe with Wilric. Hunter for 50¢ —

Have Table put in Ford test room

Study out of hours - Fully Explained Ford Engine Operation & Drive —

See Buick Stanley Cellar Lamps

Explain Jiles cycle H Bedford Starter —

Test Hayes no more on tell together orders

~~Wrotte Carr finished 10 turns~~
~~100 moulds in 10 days~~
~~after delivery of wax~~
~~HH notes by Miller~~

~~Get Bailey Co trace about~~
~~Iron loading —~~
~~also get a list of pockets~~

~~Recitals Held Pearson~~
~~Chautauqua~~

~~Drs about Cold tests on~~
~~Ferrous Ammonium &c.~~

~~Cold test on No 4 Off~~
~~Compound die.~~

~~More Anna Case inquiries~~
~~get list - also Margaret Keyes list~~

~~Req Fz OH No 4 also Req die.~~
~~Charge once long charge & discharge~~
~~Charge again, Tub dip in Alcohol~~
~~& water pump dry Alcohol out~~
~~trace of self heat if not, Report~~
~~make 4 each kind —~~

~~Press & grain pkts the Ferrous Hdy Sulp~~
~~Fz containing 20% SnO - 2 of them~~

See Walter Muller - Eleven
Shut up London office
Send Portrait Music
here - Close it up
until - I will let
you know for my permanent
F 2 20 Gm

Lunge says best for Phenol
burns on hand is a fatty oil -
Olive 8 ounces - Mix to mash 1 oz
5% NaOH, then water then Olive

Hoffman - If you have Crude
Resin Make up a Salah
of Powder with Phenol
Alcohol & 5% 6% -
WE will make Blender
then thru -

Fred Oth drill 40/1000 hole
End to End + put 2 wires crow
in + then peel in grids +
Smooth pieces - add 10 wire
in Contact - also 2 with
tubes - Endwise + sidewise -

Old blends 710 000 lbs
of which 450 000 lbs are shown
& must be added —

New blends 497 000 lbs

Since advent ED Dyes other
types are mostly used for
dancing - cole & —

Old Col Stewart & Automobile

Uncle Josh buys an old 1 side
Village goes up Stewart & Parker Zwicker

Fred Ott - Die square
Condemned Vacuum —
& also not condemned but
stiff from dripping —

Speak Bernhard Zobel has
a sheet of his record sales —
to bring up Disc sales to
date & keep up.

Determine yield on
MP Crystal —

Keep up Experiments on MP Crystal
Pulser Vacuum & Demonstration
of —

After MP Crystal OK run
Cold test,

Correct MC/Chasm
Electroplate Disc.

Correct MC/Chasm
Electroplate MC & Co

Now Cylinder List

In precipitating NiOH
it is possible organic matter
in Freers NaOH dissolves
NiOH. & the 1/2 left drips
& leaves NiOH Collects —
try

Try A4 double measure
of precipitation —
& twice the dumps
of 2 1/2 flake 24 grams
possibly 25% NiOH.

Smith — Hereafter
put all Electrolytic
from small lead
cells in a bottle &
send over

Tell Y M M dissolved 1 oz
his NiOH, very dirty —

find out what water
J. Betty Co uses to
wash Ni to size of
filtered — Very dirty —
so does well water —

See how you have
paid Shaw

~~Do your transfers get~~
~~[illegible]~~

Why not circulars
worth records on
hand to the 2000
dealers at $50. Cost,
or open 25 —
It would pay

See if Smith has the old
Blacksmith Coke —

Look up records & find
1935 Shoal Creek Coke &
make 10 lbs Bi —

Ed Rice, charge Things

Tied fix cup on
Simplex go cant
Come off

Smith send Salt
on dredge get
average pulling

Small rock in Gathering Cup:
Stoker in Crucible

Aug 11th 1930 1750 lbs
Pentaphenylene deposits on
hand, with 1/2% in
powder & can it will last
4 months Experience of our
use 25% reground blanks
bottle Repairs records 7000 need
last 7 1/2 months

Patent the Rubber or
powder blank & back

Not Hiring Night
Shift.

Gross Smith Mi Lock
5000 to 10000

dec 12 1924

Cost 10 B4 cells

Material	20.389	
Labor	6 162	
overhead 183%	11 276	37.827

Cost one 10 cell box

Material	.917	
Labor	.295	
Overhead 183%	54	1 752

Cost 9 B4 Connrdon 2 lugs

Material	.307	
Labor	26	
Expense	475	1 042
		40.621
Bottle Corrosion Dipping forming		180
Ready to ship Factory cost		40,70

Shipping	50
Selling	-3,00
Advertising	1 20
Service	1 50
Other Expense	1 25
	48 15

No profit,

Write Wagner London
Paraphenylen Diamin
Hydroquinone
Carbolic

Thursday Friday Lucas
to Times

Get data for King & Lugt
only

Reg 1/4" pockets are 1.35 thick - 3/16
mech pkts are 1.05 thick
1/4 mech pkts of A length contain
8.25 grms 3/16 pkts of A length
contain 6.1 grms
1/4 mech pkts of B length contain
6.25 grms 3/16 mech pkts of B
length contain 4.6 grms

art copies from Legal
Dept auto violation
Williams Lamp —

Ray in plate work
saw Calleson —

[illegible] Can [illegible] Ringel.

Look up Cross X in Lange

Gwr [illegible] Vinyl to map
with [illegible] Fain —

Get WC Ar[illegible] to
US 1.098 776 — 1.098 777
glycol phthalic [illegible]

Try glycerol also lactic
Citric in [illegible] to help
decolorize Tine

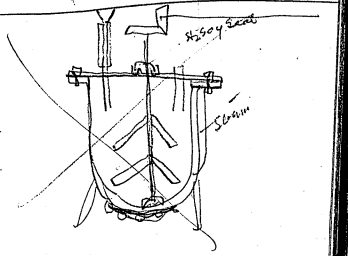
Separation M+ Para Cresol —
Cresol must be treated under
30 mm pressure at 30-40°
with the theoretical amount of
H_2SO_4 at 60 Bé — In order to
sulphonate all the M Cresol.
The solution is neutralized then with
a suitable Na Salt & the Para
Cresol is driven over with steam
The Na Salt of the Meta-Cresol is
then decomposed by H_2SO_4 &
the product distilled with
superheated Steam Sep 1913 —
H. Terrace, Jr.

C45.J

Saturate Crude Cresote with Milk of Lime the Ca Salt is Meta Cresol which is much less sol than P Salt separates out its efficacy ~~[illegible]~~ and decomposes with Mineral Acid. Distatively pure Meta Cresol obtained. To get more work Crystals of Meta Ca Salt with Barytal to get rid of Meta Cl liquor

Another Man uses Barium salts —

Another Concentrated Mixed Cresols with Acid Sodium Sulphate to 100–110 Cent – Analogous product mixed under blow P Cresol separates out as oily layer. The Meta Cresol alone being sulphonated. This Meta is got by pour separated Sodium at 180 °C after P Cresol is separated



Aug 19 -

88298 lbs

Carbolic on hand

Chamber Acid

7.25 @ 750 Ton f.o.b. Niagara

Tank Cars - 55 and 60 -

62.18% H_2SO_4 not less

Must unload Cars quickly as need tank wine -

Put 2 A4 Cells Varny

15% NaOH & Reg

LiOH. Endurance

2 A4 - with tubes loaded without the Extra weight on 1 amps - & also Latest tube not already in making - set up for Endurance - at same time make 4 short tubes without extra wt - also set up the seam 6 tubes long for reg test to get Capacity

Fritts & Slagher

Chem Bar 1904 2003-2019

Electrolytic Phenol from Benzolsulphonate -

34% - try

Try Oxidized p-phenylenediamine
get power on crude
NaCl?

Daily heat records
Above refrigerating
say 110 –

Danville – Run the
2 Thursday chg +
dewaxing Cold Ice
water pr also Zero
also 130 heat,

Harry get Norris Recoiled
Shipments Records from 1st
to Aug 26 5627 daily (12)
Each wkg day +

500 gal oil off 5000
gallons Tar
1/2 gal Tar per
M cu ft gas

5 1/0 of Oil is
Benzol

Steamship Carriers
[illegible]

Precautions to get good
yield – Friedel & Crafts
Bull Soc Chim 42 pp 68-69
& American Chem J
6 152 Transactions 1884-148
Formation oxidation
[illegible] prevented –
Also Chem Ind Vol 48
where & [illegible]

Cresol $C_6H_4(CH_3)OH$.

Acetylene, Theoretically
requires 3100 KWH per ton Carbide
Niagara Falls 5908 stock furnace
" 4090 Tapping

Tapping furnace 5908 KWH Ton
950 K lbs lime
600 " Anthracite
gross 85% pure Carbide then
one ton gives 680 lbs Acetylene gas
equivalent to 90 gals Benzol
at 100% pure 90% Benzol
Costing $24.00 651 lbs Acetylene Ton Carbide

Langerhans will.

Weekman found III &
female of 10 years Rheingold
beginning at the stomach
suggested death Mabyson
Holland answering
Lusten

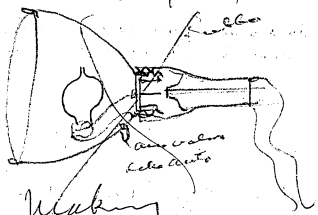
Mercuric quin 2/3 oz. cocain 1/3 Cocaine
1 c.c. quinine 40 grains benzol per
Cubic Meter to obtain
16 C.P. gas

Treat Bay 60 ayr &
Barrell with H_2SO_4
to get rid of the bodies
out, also heating
with Na OH,

give a - a good ground
stall to produce
the Cresols - 15 gals

also post heating
100 gals the Cresols into
phenols -

Aug 3 1914



Making

Look up Conc. Mg 7/8
book - see about
25% Rate or 15 @ 21 Mg OH
dissolve with a Rod —

Benzaldehyde with few drops HCl
Condenses phenol to white Resin heat
try it + Cresol

Try formaldehyde on Benzoin
with some HCl. also ortho

Sol of 240 grm Na Chlorate
& 320 grams Na Chlorate
per Litre, at 20 @ 30 Centigrade
with Current density 20 @ 30
amp per sq grm DC m
gives yield of 40%
formaldehyde and 20%
Methylcelulose,
Martin Woest DRP.
138442 – Chem Soc J
Abstracts Vol 84 1893

Passing Dry air or Ox.
through Benzol Coreum
Chloride aluminum produces
phenol + r2d compounds
Friedel + Crafts Ann Chem et Phy 14 1

433 472

Naphthalene heated
with Excess of $AlCl_3$
gives Beta of 4 bepthydro
of Naphthalene

Meta cresol fused with
Potash gives Oxybenzoic
acid –

Distilling O M or P - with Na
Cresol gives Oxy Benzoic acid

Chrysophanic, Distilling Calcium
Salt of fatty acids gives
same result as use of
Phos Pentoxide,
Stenhouse Ann Chem
Trans Vol 63

Try disclosing out the picture from film & Reader for Slow Regardless

Hutch - Get [illegible] off Elevator Brass Lead Balls

Learning where cable Sawdust

Try 007 block for tubes & Impeller rings —

Hulden - doors, new law Step up from pulley Repair on Vic Mesden How about attorney our Counsels

Ask Wallace Weller about Romain to take chap getting songs find out about him

What does mean who cortes talk on back excuses do besides this —

Rush them long way to Tuppering —

See Ott & have 3 34 pl Dies Reg mix made like 333-4-5-6 to Compare

Also Dupo made with Iron with 20% tin like 333-4-5-6 —

Find Ott

Impurities with Benzol causes
Melt to turn black —
also if there is not great
Excess of Caustic Soda
the temp will get too high

Dr Gainer — Jnl Ind Chem
[2] Vol 17 394

Benzol Can be cleaned of
Extra products by using
H_2SO_4 — Cold —
90% Benzol has hydrocarbons
in

Thrashers blackening —
H_2SO_4 takes it out

Sell our Ortho Cresol
see how much on hand
& Cost,

Monahan — what pressure
do we put on Crimping die
want more pressure
B4 plates & Crimped same
pressure as small die
333-series, then flat die —
& see that thickness is same as
a 7 gram pocket.

Legal Dept,
Get all ICS plates of
Hoop for spraying
Matter Metals and
articles —

Try Hoop process for
Coating Wax matches

Try Dup 335 -

But make 1st 5 Runs
Chg & discharge Hot, &
then Run normal.

Dup by making 1st
5 Runs Cold at
35° Fahr then run
Normal -

Dup by 1st 5 Runs
at normal temp
but @ 1000 rate
then go normal -

~~Make more~~

Work up our Repeder for
the machine & get ready
if Bill passes Congress
against Mimeographs
& make a drive for the
desa trade -

Try sealing disc bags
through heat sealing -
see if OK -

5 A472 area crimped
65.9 sq in each
24 all crimped 225 sq in each
Eachplate Crimpow 13.1 each
Eachplate all over 45 each

Get good pianist, get up 6 dnc showing how to interpret on piano with spoken descriptions –

Little Singing
Same thing
Running Scales, perfect & imperfect scales,
& all about interpretation

Booklet for recitals
The Story of the Shows
interesting – No
Sign of Commercialism

Standard Recital
Cards,

Holy Name Society –
Chautauqua Lecture
American Federation of
Catholic Societies
National Conference of
Catholic Charities
"Christian Endeavors"
Oratory Societies
International Bible Society
+ Conference –
Salvation Army
Volunteers of America
Society of Friends
Women's Christian Temperance Union
Christian Missions Alliance
Godfrey Kruegar Assn Newark

(65)

Press iron cakes dry in die so hold together, then put in grid + give great pressure to crimp around edges + form

Again 2 pockets crimped at edges, heavy pressure then that press, then cut both faces of steel packet away after forming to reduce Rubber bulk + see if they don't disappear

Assuming we have now had the deadness for a few months (6 months) that has no [illegible] —

Lemming Must for take the 10 or 15 ton at 19 [illegible] thousand, with all the delay + bother cancel

Dolly engage a lead foreman so you can expand more. Try Thurnes Varnish + cost all over good records. Reprinted as long as possible until they will print no more than fresh coat all over a see how many times will go on gives —

Some one Alum must do test out over bedding on blankets and other needing sound by outsiders + get reports if OK will then start Campaign —

Get Curran on several times
bottles 4 yrs old.

Get samples & Curve of
Iron clad of Amer Express
Co – for our travellers –
use – properly published

Supply Motor Lighter on
our bottling. Not acceptable
with Lead –

Bay Way – also phenol
MP 30cc 12 formol & phenol
30cc 15 "
Both MP + Phenol & shaved
with ammonia – See if
resulting resin is
any different –

Try $AlCl_3C_6H_6$ + trioxymethylene
$AlCl_3$ added very slowly –
Condenser

Learning – Turn House etc
protect Reserve Stock House
from fire / Large investment

Also Dimmedive about
Stock House for Maslin
+ 2nd Maslin Moulds

See page book about
face cut off / face of 7½ packets

Dilley – put Varnish on
& then use flat : scraper +
thin down

Dry ~~about~~ Ford charter
our new machine

Monahan - grind cope 7½
perforations & make up
lot 7 gram pkts H-OLL
4 Dice crump & then flat
press, this redressed

Buchman - Yoke shoved
make up 200 or more
J 5 Cells

Hoffman - Immaking Varnish
Rule must have as long
& if pole too thick can map
4/10th Pans. Then will stop
Chem - use 3 of Rockefeller
warm Room

Moore - How about the
Edging Lathe - the Phonolite
Sawdust

Leaving How about Cohen
pressed dust.

Ney - J wa, test for strength
6/4

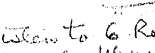
Smith to make Valt
Effecting A4 Tin Cells -

Buchman - Ask Smith
get tube making the shop
so they don't strain
tubes -
Also why don't you
move your lab at Lab
over so Smith can watch
him - Leaving Job now

Fremming - How about
Mitchell Hoover have they
been stopped -

Letter to G Reg G Reginald
re copies Wagons & gallery -
surelly are hard times - for ok
Tuesday 1919 October

Dally - about needle +
small drop on bubble
repair - too much varnish
need -



Electricity heated
Wire & small
lead out

Fred Ott -
Edison try rough first 1" dia
heated on wire of the platinum
twist -

Almquist - Have you got shock
absorbing spring on
also lower clutch -

Watts Walker Nelson Rivers Shannon

Life on the Ocean wave
Old Black Joe
Old Dog Tray -
Climbing up the golden stairs

Story of the phonograph -
Write up -

Why should McRae Just Go
to be a jobber of meat supply
& capital -

Get some Varnish filter
also set aside in long tube
1" dia in Ice chest to settle

J W A - perhaps we go to
face in Resin alcohol leave
- 22% phenol to get more solubility

Go & look at our mould
Vicults. & propose Xha bldg.

Find Old Battery box
& lamp in it See Almquist.

Model J5 battery box any
space & lamp

Leads and thus -

Try ~~Odor~~ Reg phenol 60% formol
& dilute but with SO_2 dissolved in
it -- both put on together,

Bollman - 1025 + 5% less
formol + dilute down to
22% free phenol in -

See if Hoffman has the
fine linen -

Meadowcroft telefone Adam now
if the well soon have the books

Send Note to Bachmann
that volumes Returned
Cells are cracked out
that when new Sol put in
75% of original to grow
pen A & should be put
back. as dirt collection
out in 10 days - Specimen
to Gresley & Harry Smith
thoroughly washed and clean

Find drop on Commutator
of Ford Starter if metallic
touches earth that Head
lamp are

Smith - test A4 that have
the mercury in 72 ow
Cold test -

Got from J V Miller some very
large loading weight the
[illegible] or 6.8 oz
Loaded in short tubes then
Rim in saturated Lithia
in 21% (10) after 2nd run
add more LiOH, till
Mr takes up all it can
see it burns -
As soon Li burns tubes it
must be a salt formed, MgOH2
being the need to prevent
bursting must have low load
weight,
also change the 5 saturated
LiOH. - once, then change
to 21 KOH 2 21 -
This permits Li to combine
with Mg - g[illegible]

Smith 2 cells Reg 7a 1 short
tube #1 OH lic -
5 grams Lithium chloride in
21% KOH try resistance lifts
and heavy discharge rate
with a drop same, do over
with 21% 2 KOH -

J V Miller have me Couple
pounds of the iron you
made for William Rec
Want to make cold test
on it, with & without Hg in
New die -

Chromatimen - get solubility
of LiOH in 17% & 25%
KOH.

21% Saturated with LiOH 100 cc
with 2.858 gms LiOH.

Make Couple of grams
Soaked in Cupric Sulphate K or Na
also KCl Li Sulphate or either
Very sol salt which Crystalizes
antiferous - Then load
tubes, then soak out
Sulphate or Salt then
~~Start~~ put in 2 K/2 Li
It showed more low loading
but a bit porous, then fine

Couple of Regni dipm
Saturated Light, then put
in 2 K 2 Li - ~~[illegible]~~ well
pass

Victor has some well known
names but no ~~results~~ singers

State Form
County Form
Chamber of Engineers
1500 Chautauqua Institution
1369 Elks
434 Foresters Ancient order
4149 " Independent
1865 " of America
1545 Eagles
7500 Eastern Star
576 Fraternal Brotherhood
1150 " Union of America
1276 Gleaners
776 Heptasophs
1476 Ben Hur Tribe
3850 Brotherhood of American Yeomen
540 Catholic Knights
1204 Court of honor
1603 Knights of Columbus
4884 " Maccabees
1400 " Modern
1015 Mystic Workers of the World
1878 Owls
5291 Red Men
4500 United Workmen
16000 Woodmen of America
10346 " " The World
5234 Odd fellows
1929 Royal Arcanum
3057 Masons
1526 Knights Templar
133 Mystic Shriners
87754

NY City not Brooklyn

900 Restaurants
7 Pic Nic Grounds
450 Clubs
800 Associations
120 Halls
125 Church Organizations
175 Churches
700 Hotels
18 Armorys
450 Schools various kinds
2500 Saloons & Cafés
85 Phonograph Dealers
200 Piano "
175 Banks many have dining flats
400 Insurance Co " "

Look back on daily reports & get date where pull outs on Brampton started also when Records Cracked last

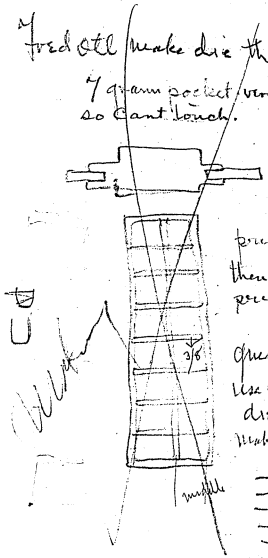
We should have a Log Book Entering temp of floor room of Varnish washing room of temperature outside Kind of weather & temp of the cooling coolers

Fred Oth, ground up some of the rubbery oth & fine thin Bo wash & varnish Varnish may have to run thru mill Resin Method & Chep Repairder to get it fine

Weakness of both Discs
Cy Pepsin pbly Acids
Changing Strong worst quite

Fred ctl make die thus

7 gram pocket very deep so cant touch.



press 300 atm
then Smooth
press 75 atm

press balls
Use Req #4
dia 4"
Make this thus

Follow up Rupert battery till returned in good shape with all the cells originally

Moore use same record as before with 6 Req + 6 repeated once
6 repeated 4 + 6 Repeated
8 terms - 9 yields heavy fog and surface

Kennedy dark Nitro & Accocellulose films in Water to Strength

J.5 - 62.5 Amp -

Perhaps Reynolds would a different solubility

Think our Var too thin & dense Spring – must have less alcohol

Make some Var with 6 Pounds but 1/4 % Pum & the minimum amount of alcohol possible

See if Acetone is better solvent for Resin of Shellac (lean Alcohol & a little water) reduces the viscosity also How small amount of solvent for Bengal would do it

Try Test on Shellac for Cresols & Alcohol for % of Alcohol

Get glass for mixing lamp & start dropping tests –

Lower all test schedules to 6 oct Solvent for Resin 6/4 Pounds liquid to reduce viscosity and Varnish – 2% by weight added Eosin Rub. & Mental Viscosity –

Last part of Rada in Kettle probably was settings

(85)

Bachman - see if the old & yr
Adams Express weigh 6 cells
still have original solution
in - also ~~[illegible]~~ have yr only
take samples of electrolyte
& test for Sulphates -
also take 60 cells ~~[illegible]~~
& Reform them using 3/4
of the original Lithia -
say 68 grams in new solution
& make 3 runs & let
me see sheet,

Also after above runs
Remove 2 cells that don'd
come up freely soak
out keeping 3% KOH
in Remove wires & dry
them & Crump with No
4 off & Reassemble
& Reform with 1/10 gram
Li OH + 25 KOH

Try experiment of thick Varnish
so thick don't flow & use as
sewsep to distribute it

Send phone to John
Wannamaker & tell
list records - Write
on - Chippendale or
other

Fred will get me some
dried Varnish & Daly
get me 1/2 dozen pulled
cells & Varnish Enough
try it

Experiment put on gob
of dried powdery Varnish
over with clean flat paste
& bake - Roll & thumb

Try Chloride of Para -

Try punch - punch out 1/4 disc of warm Condensed Vinegar & Cream out pulls outs -

see if Schell Formal on breaking alcoholic solu of 1/4 by HCl then try when there is Para in

Find out price of Bromine - Can make Tribromophenol

Easy - Phenol in B&O Phenol by BN

Perhaps I wants little Oil in Vermish - Sesame or oil that don't devalos much ~~of~~ that on Soap alcohol Comes out there is an oil in Tablet

Smith to Hardy all A4 or B4 2½ with new Compared Fe at 100 Rate

---

Re Salary our Bal Inspectors Sales Expense accounts -

Following Varnish Tried

Alpha Naphtol - Marked in book
Very good - I tried alone & with varnish
6/44 it Coulness to resin
Hottle - Sept 10 transparency bad - Duplicated
at 9/6 75% pull with NC

Para-Toluenesulphochloride
Very good

Acetanilid Very good

Chloramine salicylated
Very good

Green Diamond 55% Sol
Very good

Rosolic acid 2% good

Salicylic acid - Very good

Rhodamine BX good

Safranine Base 61% good

Pick out Commercial Records -

Patent Dry process
Mummy Camp -

Make list of 25 of
the Best General
Records -
Opera -
Bands -
Girls - for Recitals

Try Phenol alone +
proper amount 6/4 to
Harden

(41)

applauded at ~~Dem~~ Grand Opera

"The Horn" "Skylark"
82510 82047 80141
82034 & Silvery Colombo
50060 - Mussorgsky

Chuller ~~Wonder~~ Sol 11 no pop
favorites were
50060 50145 Sweet Pabrah
50085 80141
Drifting 80105 80149 80135
50148 50078

W Miller Alice Sovereign
Mezzo S or Drap Coloratura
Adriana Sovereign
test

got from W Gadd order
of balance on A4
for all defrecs -

Classon - Chicago
Mg for Hons
Drifting Quit it
do it from Orange -

Call Bee all future
to 450 Inch & 120
dollars to inspect
during guarantee
period of

Haynes and Court see
all Richards with
old records they don't
want - put all Richards
in 4 Records 25 Records new

~~Joy Quinone~~
~~a Bright Quinone~~

Quet on Turnetta - good

Wood Oil also Shellac
with Wax out also with
in place Sandarac -

Get amount Sandarac in
My - Bag of Phila & find
Enough Cable London

Sandarac from Conifer
tree Callitris Tear tree, principal
tree of Allies Moroccan
Morocco Africa Stratworth
England - Also found in
a Coniferous tree in Australia
Used in Varnishes like
Mastic -

Hydrated oil with ~~Sulphuric~~ oxidizer
~~Joy Alcoholate Zu Steanate -~~
~~Joy Dragons blood~~
Elemi resin imparts a
toughness to Copal Varnish

Gum Sandarac
Wm H Scheel
59 Marchenbank Ry
Sandarac Hecate normal ferric
FSC

See if can get rid bubbles in
Sandarac by dehydrating it
when dissolving Alcohol
detto Dragons blood -
Elemi

Include The National Mag in Advertising

Orange
Hackettstown
Delaware Water Gap
Stroudsburg
Scranton
Pleasant Grove
Owego
Cortland
Washington

Above fully as serviceable

Newburgh
Kingston
Ashokan
Delhi
Davenport
Cobleskill
Cooperstown
Cortland
Ithica
Walkins
Bath — to
Danville
Warsaw
Aurora
Buffalo

Hornell
Dansville
Caledonia
Batavia
Buffalo

West Road

West Pittsburgh

Include National Magazine
do other —
Order Tom Sandrock
Order Moore & Burley on
Sandrock
Get Collins & Harlin pieces
all —
Get Hughes also get lot of
100 songs words & music
Chorus
do Cornet Mouthpiece
Drums — Zithers Mandolins
Guitars —
Cornets, Clarionettes
More Cello —
Regotti's Quartet &
put a lot of good swing
& snap into our
records, Promise to
pay up the Common
popularities long

Get lot of Comic —
See if Harlan Cant get
some Conversation pieces
with Collins —
Helpin Kaos Wrones
Medley some circle record
Conlemers get a Medley
& use these to Col
Superior Jazz —
or a suitable second
Moore to see Sandrock
& go ahead with old way
of making Condensed
Publications —
Rig up to get C.P. Sandrock
still for Record
See plan Tyrol Bergh Dell

See Steel Trust NY about.
Pays prod. that comes, what
they do with big —
also New Haven
also. if Bay wash with
Rep on supplying Bunyol
also if Dupont will
buy Solvay —

Get information from Trumbull
if Can get Bunyol from
Penn & or Tex —

Analyze Hanna Produce
gas here —
& if ok if Can get
from coke here big
produce gas plants
of Cortlandt
See Brady & see if Can
Chill out Bunyol —
also about Bowlon Yards

See if Pennsylvania Coal Co
have bys product ovens
While in Pittsburgh find
out about by & Product
Coke ovens if Solvay
has them also —

See if Dwight By Prod
Oven are in operation —

Try Mitalara & Sacramento
for Venice —

See if Crawford Wear coal
beds Melting pots —

Lookup Work for
Melting in Books
Calloud & Jak has them
from out builders

~~Telegh Learning stop~~
~~ordering any more~~
~~Paints from Condensite~~
~~Co —~~

~~Jewa Tools Spearing~~
~~Commutator now~~
~~uses Vulcanized fibre~~
~~Wants Moved.~~
~~Condensite Water &~~
~~wear proof —~~
~~Use Asbestos or~~
~~a hard fibre —~~
~~See Jewa —~~

Try Sheet with lines Nickel w 7% on 1/64
apart for Cell for cleaning
Sheet Cobalt, + sheet iron porous unglazed

Send Ford Cells Uranium
for detecting seepage
of water + fluorescent

Columbia has lithograph
of Artist 24 X 16
good done —

To Mellow + give appearance
of more instruments
put in frames with
Carbon Incandescent
& Replace with frames
painted to Recently frames

For Master records try
dip in rug wax of
a Hard Rubber bende
also one made of poured
Sulphur –

Dipped Cold to see
if Cracks –
also dip wax blank

Learning Who keeps
track of our overpaid
men –

Ultra Mica for Ford
T M Lynch recent
H C Lynch Coal & Coke Co

Make some Tests of
Cobalt Cobalt Fe
+ Fahrenheit to make
Cold steel for electric

Walter Walker get trials
Lucy Gates see musical
America Now
also of all of
West Co House now
surgeon – also Sovereign
Bethel Tenor, West Office

Go Ryan & Martin still
with Victor
New English Baritone with
Dippel Wilfred Douthitt

Dippel = Eleanor Painter
Hearts of Oak - Probably remedies
Hold your hand out Naughty Boy

Grace Fjorde opera singer
now in NY -

Slevens Houses sales Disc
in Australia - Argentina

Nico Edelson written Locoon key
The land of the sky blue
writes Cadman

Bettina Freeman
Prince Donna Boston Opera

Anne Frances Rose
prima donna soprano

Marian Wright powers
Colorature -

How about Florence
Hinkle -

Is Fremstad tied up -

Better get to Baker
see about Phenal

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Prince Donna Boston Opera

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see about Phenal

1 = Try if Belgian sulphate lime would attack the

2 = See if Mix of Benzol sulphate & H_2SO_4 can have better results by Lime & Benzol SO_3 by Soda

~~What will happen~~

3 Try Barrell -

4 Try Long tube 12" of pulp & add ~~Extra~~ lime with Rubber hand so 24" of water Column can be used

5 = Ask Which Hoovenschaf would stand delivering a gross wt. 5 to 6 lbs daily

6 See Hoovenschaf para wt hours

find out How many Extra Milking allowance gone out —

Moore - Beff a worm

Record -

Hoco is heavy wt spent

Knocking off little races.

Get In my Southern Sunny Home Woundering Pleasures of [illegible] woods [illegible] to Belgian sulphate

Trace Tony of Tipperary Thorn [illegible]

U S Graphite Co
Saginaw Mich
Send 10 lb sample of your highest grade of Amorphous Graphite from your Mexican Mines

Try Cobalt acf so Cadmium Electroplate in Storage Battery for Cold Cranking work on Lorain

Maxwell - & Cannatell of Jamestown have a machine & think can grant licence Money to buy yet dealers without it

Cold test small Cell Reg No 97 .4 grms KOH - Nalf Lifl. 15504 Na504 + 2 check cell nothing Xtra by -

Special Recital Campaign on Niagara Falls, Have one a dealer

Very fine perf shop grade with Oxide Co fill perfs. Redeep in to to weld then add of CO_2 + Co for Selfplaiter - might use Cook's or builder

Nitro Nickel reduced by H + welds then make green Electrolytic by KOH in which Nitrate KNO3 KOH in vacuum in -

Saville find out if its Electrolytic that is fault at Lorain Lamp or How much it helps -

(111)

Nov 18 on hand
13 days Carbonalin
8 days Reman
23 days Hetlah Carbolin
148 days Para

Tube picture right off on
Carbolic process —
2

26
20 days

Displacement Tests
Benzoylsulphonic acid — Ca Sulfate and Lime in 1.85 Water
250 cc
Dry Caustic Lime — 150 grams
Slaking water — 500 cc
8" Column of mix in 2" tube
Amount Water Recovered — 500
" " obtained — 700
Water Column above Lime 12"
8½ Hours to leach
700 H2O had 99% of Benz 50%

Wants about 6" of Lime mix + 10" water — for large tank.

Test Caston on 250 Mercolum —

Get up a Volum interpretation Curve of some well known Comp

Hayes — Put out NaVoo Ele Moor Opera —

Whitley — How about Wells —

Victor
Your Eyes #70111.
Also Mac Problem generally
good Barrlond

Where are Those 2
Disc Speakers get
them & have them for
them night —

Case — get Band doing
proper Propheccy —
note how horrible rough
Have Case do it —

3330A When the Ebb Tide
flows Male Quartetto —
I say I never played this
tune as "recordered" this way
its rotten hold it up —
Twoastepto

Sunny Young Fisk Chicago
Chapman
Jassed 2510 A Bonfay
best Same empero

What Cocaine of Rupert's
battery

Enter — book 400 E is
all Cobalt unless of mon to
see how it works Cobb 350
401 is 1/2 Co 1/2 Fe

Mark Circular Calling attention to all Cycle dealers of the Greatly improved Bluebird Record last months & that ~~[illegible]~~ Cascade the Ordinary disc Except Em will show how far they are superior to those discs Quality will be kept up Even improved

Rally

Put recital man in Akron + Canton to work in conjunction with our Exclusive disc dealer put them on the map

Mills Evansville Ind 70000

[illegible] disc dealer in Trenton if so a recital man should go there Victrola

Service for printing in white in Edges of Disc –

Are we asking 25% old blanks graded up –

David G Kerr

Don't act last + do on Supplements until I agree to it –

Patterson - Passaic if we have good dealer —
Jersey City Hoboken
Newark. Rectals.

Rectals in dry cells to get people educated so when time [illegible], can do big —

Have Yandes hear McGermans & see if she has no friends

Wattles try get trial of Zolingers

Sandbach lemon

Mt Ef put ann

Saville accounts try Ni tubes against Zinc negative Cold test.

also Reg little cell - 27%
KOH also 33%
2 Light, Cold test,

Also Cadmium sheet against Ni tubes Cold test,

Need [illegible] let you ask Bay to say I could supply no [illegible] along with Yangos —

Ott - try Ni strip & Zn Neg with KOH, little Mercuric cy also look up KOH Exports & find out what it makes & g sol in KOH,

Try Fe neg & sheet Ni Oxide with Cobalt [illegible] in KOH organic [illegible] KOH.

Try get Sulphur out of our Carbolic - use ferrous iron
Nephrox - try for Resorcin -

2200 Phenol daily -

1 lb Phenol

			daily
Benzol	1.43 lbs	Benzol	31.46
98% SO4 acid	7.19	acid	15.818
Powdered lime	4	Limestone	8800
Soda ash	0.7 - 8 lb	Soda ash	1612
Caustic Na	2 lbs	Caustic Na	4400

Have Wizner displeased
Special Gentl. on
a way does not work

Willer - State of Wireless Control

July 12 1914

10 000 Disc daily
80% good - 12 500 made

Blanks & Veneer	725 00
15 White Wax	18 45
15 Master Moulds	18 45
30 2nd Masters	36 30
80 Wkg Moulds	96 80
5 Master Labels	23 75
80 Subs " "	22 40
Grinding supplies	50 00
Pay roll	1437 00
General Exp Disc Dept	516 00
Talent	250 00
	3193 00
40% Genl.	1277 00
	4470 00
20% Selling	894 00
Total	5364 00

53.6 Cents per record

[illegible]

Try some ~~[illegible]~~ A4 cells with some stable organic stuff to make Cobalt more soluble in the KOH. This may be the solution of why some cells are good & bad cells band with Ir Co & B. —

If we boil NaOH in Alkali no NaOH desires to increase size of Crystals whereas if we had a slight amount of an organic or a Cy present to make it slightly soft it might make Crystals larger & give better or poorer results.

Subscribe Aqua fortis gas lighting right Vals from Jammy to date

Metal Tray Battery 6A4
Wt 10 lbs 12 3/4 oz
New type button 6 lbs 1 oz

Jany 29
Records in Cat & Supplement 389

New Sup	24
Next list	42
" Single	14
Not matched	8
	477 Tunes 245 Discs

---

7 weeks ending April 5th/14
Average price reed
63.3 Cents.

Tunes on hand Dec 5 1913

Good not recorded	not matched	68
" "	Songs	94
	Beautiful	27
good Light Op		194

Thompson - see Puntoch & get people get sample of their behind improvements from Compressing their gas — full Bergius. 80% of gas is 6 at 1-Dinoat hydrocarbons get 1500 lbs of chas per ton of coal —

Bachmann follow up the Stanley battery & put out 1/2 day on Cans was known about.

	Cent
Cost flowing plates (2)	0.7
Washing	0.7
RCy+ROH.	0.27
Inspection	0.25
Oven	0.01
Plate cleaning Scraping etc	0.30
Per transfer	2.23
Varnish (2)	2.18
Total	7.41

Lead Battly 3rd cure
425 amp 8000 - 20000
Miles - thrown away Beach?

1907

Byp Products Ovens
see C G Atwater United Coke & Gas Co Whitehall Bldg NY City

Cambria Steel Co 372 ~~112~~ ovens
dont use gas for illuminating purposes

Lackawanna Steel Co
252 ovens fuel gas
Coxyanthetic

Mich Alkali Co 15 ovens
" fuel gas

Dominion Iron & Steel Co
500 ovens fuel gas

Nova Scotia Steel & Coal Co
120, fuel gas

1000 ovens

Illinois Steel Co 280 - fuel
Carnegie Steel Co 240 "
Penna Steel Co 120 fuel
Tenn Coal Iron Co 120 fuel
Central Ill Coal Co 40 fuel
Rebort Coke Ovens Cleveland 105 fuel
National Tube Co 120 fuel

Go over to Bat & with Buchanan decide Research room

Pass 100 Cubic ft out
Newark gas Thru
M P Cresol & other
Pet Oil BP 300 or higher
Oils & see how
much we can
get out of Benzol
& Cresols

Test Returned Milwaukee
Battery — or Lithia —

Reilly Kansas City
Put it on Map +
also St Paul —

Hilch - Auto Exponent
cost 1 Cent per
per gal for Solvent
distilled off 90%
Benzol - to 100.

Dec 3 1914
Firm Lockhamm Steel Co
Take 500 gal daily 2 years
at 20 c gal for CP Benzol,
or 72% at same price must
less Cost redistill 1½ c gal
then 1st Call next 2 years at
2¼ Cents & after that 1st
Call at Market price

See Grimes 2000 doc work
Can be used again

Try wiping Condensite print with Alcohol 100% to dissolve surface take out Chalkers

Ditto dip a print in film dope as we now dip Celluloid

Ditto thin shellac ditto
Condensite Var - ditto
Sandarac - dry thoroughly
then grind size

Take a wax disc - place ball ~~[illegible]~~ - same disc as knife - put on a spring (long) adjust to grooves use just enough pressure to smooth the Chalkers and run slow across to pick out Chalkers —

Another dissolving pot
See Chapleman —
See if can get 2nd hand still —

1 Months supply 2200 lbs day
Phenol -
Benzol CP 80000. lbs
Sulphuric 400 000
Limestone 225 000
Soda ash 42 000
Caustic Na 115 000

DEC 3rd On hand
Caustic 47500 lbs
Soda Ash 14 000
Picrates Cals, 50 000

Another still for distilling Cocoa-Cola.

Troy 2nd hand dealer

Stetson Plane Co

Ridley after trade to these — Stevens

"Vandermuth"

402 E as number to be given Cadmium iron as Iron — 2

Send Calmets mether to put in 4% Hg

#1 403 E

As an Experiment to see how far Cream go. make 3 gal Vat 10%

Stendrax

Cable Wagner if can ~~[illegible]~~ Buy + ship 90% Benzol gives price, ~~[illegible]~~ Delivered Nyork, —

Send England congratulations Benzol Ctd from [illegible] Patent just to Engineers Lackawanna Steel.

Listen to the Violin
Lateral Headgrabbers
Preconks —

Purchases of Combs
& Exclusive Dealer
in Same Town
& all Lowers

8) 3000 -
400

(||||)

200
6) 1500 lbs
250 day

𝍸 𝍸 𝍸 𝍸 𝍸

𝍸 𝍸 𝍸 𝍸 𝍸

𝍸 𝍸 𝍸 𝍸 𝍸 | ok

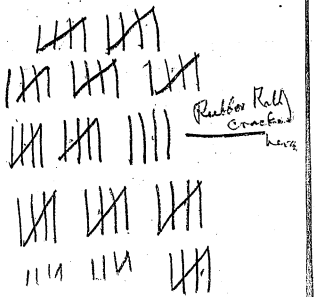
This is end bump porcelain —

Side bumps porcelain

𝍸 𝍸 𝍸 𝍸 𝍸

𝍸 𝍸 𝍸 𝍸 𝍸

𝍸 𝍸 𝍸 𝍸 𝍸 |


(Rubber Roll)
Crocked
here

4.9 meta para
Cresal –

4.7 cents – Ortho –
150 gal day
1 yr Contract –

145000

2607 Bid –
2602 net –

40 –
14 26

950 / 5700 / 8

4

26 / 1040 / 130 / 100 / 53

5

150 / 5 / 750 / 130 / 22